Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1-34. (Canceled)

35. (Previously Presented) An adaptive sensor comprising:

a plurality of detectors; and

wherein:

each detector comprises an adjustable filter; and

each adjustable filter is adjustable independent of an adjustment of another filter of a detector of the plurality of detectors.

36. (Previously Presented) The sensor of claim 35, wherein the plurality of detectors is situated in a sealed package.

37. (Previously Presented) The sensor of claim 36, wherein each detector further comprises an actuator connected to the adjustable filter.

38. (Previously Presented) The sensor of claim 37, wherein the actuator is an electrostatic actuator.

39. (Previously Presented) The sensor of claim 37, wherein each detector is an infrared light detector.

40. (Previously Presented) The sensor of claim 39, wherein the adjustable filter is a variable bandpass filter for infrared light.

41. (Currently Amended) The sensor of claim 36, wherein the adjustable filter is adjustable for [[a]] selecting a wavelength [[of]] from a plurality of wavelengths of light.

42. (Previously Presented) The sensor of claim 39, wherein the adjustable filter is for selecting a bandpass mode for infrared light.

43. (Previously Presented) The sensor of claim 39, wherein each detector of the plurality of detectors is a bolometer.

44. (Previously Presented) The sensor of claim 41, wherein each adjustable filter is a Fabry-Perot filter.

45. (Previously Presented) The sensor of claim 35, wherein the plurality of detectors is situated on a first wafer.

46. (Currently Amended) The sensor of claim 45, ~~wherein the~~ further comprising a second wafer, wherein the second wafer is a topcap situated on the first wafer thereby enclosing the plurality of detectors.

47. (Previously Presented) The sensor of claim 46, wherein the first and second wafers form an integrated vacuum package.

48. (Previously Presented) The sensor of claim 47, wherein the topcap comprises a light transmissive window.

49. (Currently Amended) A means for detecting comprising:

a means for detecting light; and

wherein:

the means for detecting light comprises a plurality of detectors;

each detector of the plurality of detectors [[is]] comprises a variable wavelength filter; and

the variable wavelength filter is adjustable independent of a variable filter of another detector of the plurality of detectors.

50. (Currently Amended) The means of claim 49, wherein the each detector comprises an actuator connected to the variable filter.

51. (Previously Presented) The means of claim 50, wherein the actuator is a capacitive actuator.

52. (Previously Presented) The means of claim 49, wherein the variable filter is adjustable to a narrow bandpass at a wavelength of light.

53. (Previously Presented) The means of claim 52, wherein the wavelength of light is selectable from a range of wavelengths between about one micron and thirteen microns.

54. (Previously Presented) The means of claim 49, wherein the means for detecting light is situated in a sealed enclosure.

55. (Previously Presented) A method for detecting comprising:

providing a plurality of detectors;

wherein:

each detector of the plurality of detectors comprises an adjustable light filter; and

the filter is adjustable to a desired wavelength independently of at least another filter of a detector of the plurality of detectors.

56. (Previously Presented) The method of claim 55, further comprising situating the plurality of detectors in a sealed enclosure.

57. (Previously Presented) The method of claim 56, wherein the filter is electrostatically adjusted.

58. (Previously Presented) The method of claim 55, wherein the filter is attached to at least one leg spring for adjustment relative to an electrostatic force.

59. (Previously Presented) The method of claim 55, wherein the filter may be selectively adjusted to a wavelength of an infrared spectrum.

60. (Previously Presented) A sensor comprising:

an array of detectors; and

wherein:

each detector of the array of detectors comprises a tunable etalon; and

the etalon is tunable to desired band of light for a detector of the array of detectors independently of another tunable etalon of a detector of the array of detectors.

61. (Currently Amended) The sensor of claim 60, wherein the array of detectors is enclosed in a hermetically sealed package.

62. (Previously Presented) The sensor of claim 60, wherein the etalon comprises an actuator to tune the etalon.

63. (Previously Presented) The sensor of claim 62, wherein the actuator operates according to an electrostatic force.

64. (Previously Presented) The sensor of claim 60, wherein the etalon is situated on a set of leg springs for movement for tuning.

65. (Previously Presented) The sensor of claim 60, wherein the etalon is tunable to a wavelength of a plurality of wavelengths of light.

66. (Previously Presented) The sensor of claim 65, wherein:

the detector is a bolometer; and

the etalon is a Fabry-Perot etalon.

67. (Previously Presented) The sensor of claim 61, wherein the hermetically sealed package comprises:

a topcap; and

a base; and

wherein the topcap is bonded to the base.

68. (Previously Presented) The sensor of claim 67, wherein the topcap and base are bonded on a die-to-die basis.